1998-1999 Management Information Reporting Schedules

Summary Report

June 2000

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This document is intended primarily for:
School and system level administrators

And may be of interest to:
Parents
Stakeholder groups
Community members

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Executive Summary

Alberta Learning continues to require timely information about the implementation and impact of special needs programs throughout the province. This information enables Alberta Learning to monitor the effectiveness of these programs on an annual basis and report to government and the public, and to make program adjustments that may be needed or to plan the nature and funding of future programs.

The Management Information Reporting Schedules (MIRS) request information about the following programs:

- Early Literacy Initiative (ELI)
- Program Enhancement Project (PEP)
- Enhanced Opportunity Project (EOP)
- English as a Second Language (ESL) for Canadian-born Students
- English as a Second Language (ESL) for Non Canadian-born Students
- Teacher Assistant Program (TAP)
- Special Education
- Native Education Project
- Technology Integration Funding (TIF)

Highlights of the 1998-1999 results include:

- 1998-1999 represented the first time that MIRS attempted to collect program evaluation data based on student outcomes, and this presented a learning experience for Alberta Learning staff. Some of the challenges faced included: lack of controls built into the project so as to monitor the quality of the date, MIRS 1998-1999 data is baseline and provides a limited basis to judge the impact of a project on student learning.

- Of the 7 677 grade 1 students reported as participating in the ELI, one-half achieved the acceptable standard, a further 43% showed some improvement but did not attain the acceptable standard. A small proportion (7%) failed to show any improvement. However, it should be noted that literacy projects differ between schools so impacts of different approaches cannot be determined within the MIRS framework.

- 90% of those students in the Project Enhancement Project were reported as improving their academic skills, and 64% were reported to have improved social skills.

- 63% of those students in the Enhanced Opportunity Project showed academic improvement, 38% of them had social improvement and 12% demonstrated improved attendance.

- The response rate for English as a Second Language was very high at 97%. Also, there was a strong internal consistency in the results reported on this schedule.

- With respect to special education programs, it was determined that in the future a more refined analysis of results should be considered based on information on type of special needs program offered and assessment strategies used.

Management Information Reporting Schedules: 1998-1999 Results

This report presents information about the implementation and impact of specially funded programs throughout the province as measured by the Management Information Reporting Schedules (MIRS). This information enables Alberta Learning to gauge the impact of specific programs on an annual basis and report to government and the public. School authorities may also access this summary data for comparative purposes related to program evaluation and reporting at the jurisdiction level.

The specially funded programs include both new initiatives announced in January 1998 and continuing initiatives from previous years. The new initiatives include: the Early Literacy Initiative (ELI), English as a Second Language (ESL) for Canadian-born Students, and the Teacher Assistant Program (TAP). Continuing initiatives include: English as a Second Language for Non Canadian-born Students, Special Education, Program Enhancement Project (PEP), Enhanced Opportunity Project (EOP), Native Education Project and Technology Integration Funding (TIF).

To assist school boards with reporting information on the implementation of these programs in an accurate and timely way, Alberta Learning prepared Management Information Reporting Schedules (MIRS) for each program. The data collected by these schedules for the 1998-1999 school year are reported below.

Challenges for MIRS

1998-1999 represented the first time that MIRS attempted to collect program evaluation data based on student outcomes, and this presented a learning experience for Alberta Learning staff. The limitations of MIRS observed through this experience are summarized below.

- MIRS made good use of on-line data transmission via the extranet; however, many users preferred to fax or mail in submissions – limiting the potential efficiency of the system.
- Limited project resources meant no controls were built in to monitor or ensure the quality of data submitted.
- MIRS collects ordinal data only related to student outcomes, i.e. the data is categorical and has limited analytical potential.
- The MIRS 1998-1999 data is baseline and provides a limited basis to judge the impact of a project on student learning.
- MIRS requirements have stimulated review processes within some school jurisdictions and schools.
- MIRS was intended to measure treatment effect, i.e. what was the impact on student learning of instructional intervention or program delivery applied with a specific initiative? English as a Second Language and Special Education provide distinct student intervention strategies (treatment effects). Using a MIRS approach worked well for these programs.
  - MIRS data demonstrates that the congruence between the outcome numbers with the total students served is 99% for ESL and 93% for Special Education but drops to 78% for ELI, 89% for PEP, 64% for EOP, and ranges between 59% and 133% for Native Education. The further away (±) from 100% the less useful is the data submitted via the specific schedule. Essentially, the treatment effects evaluated by schedule 6-ELI and Schedule 7-PEP/EOP were difficult to isolate, and by schedule 11- Native Education too complex to measure with a schedule or form.

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MIRS Status Reports – February 2000

Schedule	Submitted Schedules			Not Submitted		
	Charter Schs.	Jurisdictions	Private Schs.	Charter Schs.	Jurisdictions	Private Schs.
6 - ELI	4	59	80	1	1	34
7a - PEP	N/A	20	3	N/A	1	N/A
7b - EOP	0	19	N/A	1	1	N/A
8 - ESL	2	56	N/A	1	1	N/A
9a/b - Sp. Ed	5	62	31	7	0	23
10 - TAP	6	61	N/A	2	1	N/A
11- Native Ed	N/A	34	N/A	N/A	2	N/A
12 - Tech.	7	61	N/A	4	1	N/A

The data in the above table indicates the MIRS response rates for school jurisdictions, charter schools and private schools. Private schools and charter schools were not eligible for all of the grant sources and this situation is indicated by the N/A in the above table. Because the submission rate was high for school jurisdictions, the data summarized in this report is believed to be representative of the overall student populations served by the specially funded programs. However, some schedules (8 and 9) appeared to be able to report more discrete program evaluation data than others (6, 7 and 11).

Also, in some instances a school authority submitted a schedule, but the student results data varied from the total number of students reported served. In this case, the missing data was treated under to following decision rules:

- An authority reports students served but no results, i.e. no data for any of the improvement categories, **do not** count the zeros when averaging across authorities but **do** include the counts of students served in the roll-up. **Rule**: if there is a non-zero figure for any of the results categories, include the authorities results in the roll-up. If all of the results are zero, do not include them in the roll-up.

Early Literacy Initiative

Schedule 6 collected information on the Early Literacy Initiative (ELI). The ELI addresses the needs of children in Early Childhood Services (ECS) programs and students in grade 1 and grade 2 who are experiencing difficulties in developing reading readiness and early literacy skills. The Initiative provides additional human resources that may be flexibly deployed as long as the ultimate benefit of any assignment serves to enhance literacy skills of those children identified as at risk. ELI also provides funding for early literacy resources and in-service. In total, approximately 480 FTE staff were hired for the Early Literacy Initiative (ELI). The vast majority of staff hired were either teachers (247 FTE) or teaching assistants (210 FTE). Total allocated funding for ELI for 1998-1999 was $18 321 961.
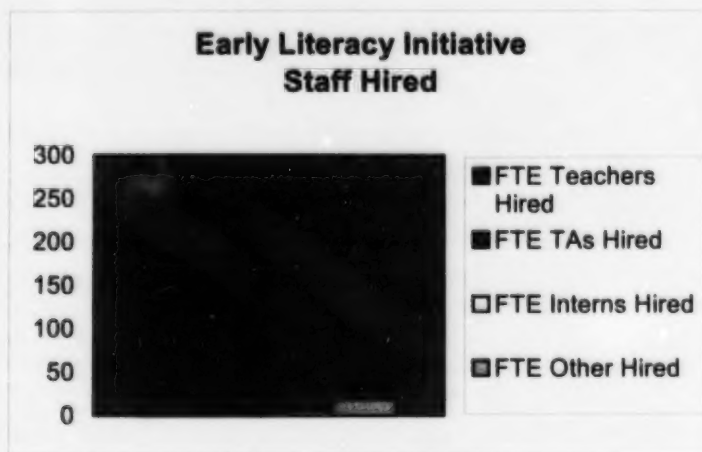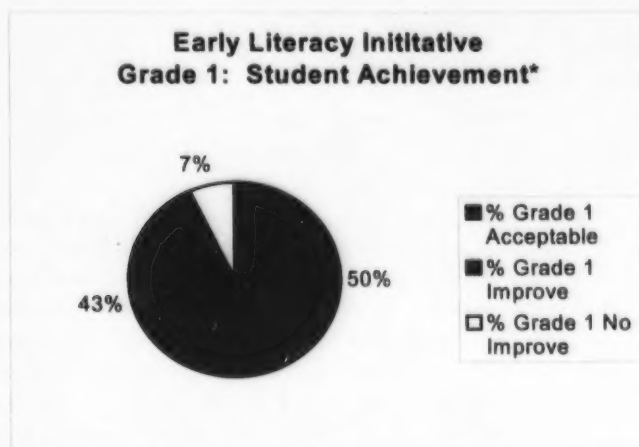

Altogether, 24 339 students participated in ELI programming, including 9 687 children in Early Childhood Services (ECS), 7 677 students in grades 1 and 6 975 students in grade 2. Based on these numbers, project spending averaged $752 per student.
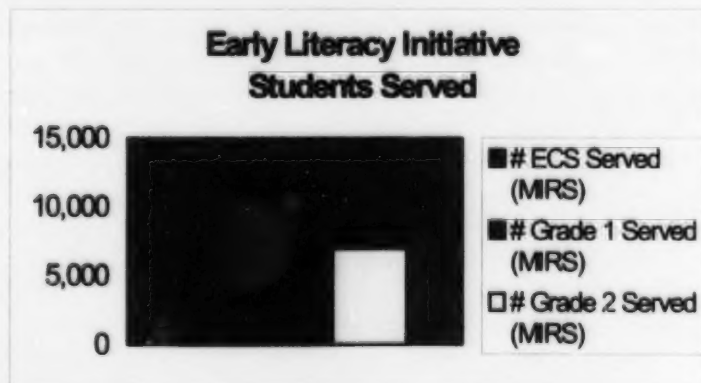
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Of the 7 677 grade 1 students reported as participating in the ELI, one-half achieved the acceptable standard; a further 43% showed some improvement but did not attain the acceptable standard. A small proportion (7%) failed to show any improvement.

Early Literacy Inititative
Grade 1: Student Achievement*

7%
43%
50%

■ % Grade 1 Acceptable
■ % Grade 1 Improve
□ % Grade 1 No Improve

*Grade 1 results were not reported for 1 603 students

Of the 6 975 grade 2 students reported as participating in ELI programming, a small majority (54%) of these students attained the acceptable standard. 40% showed some improvement but did not achieve the acceptable standard while a small number (6%) did not show any improvement.

Early Literacy Initiative
Grade 2: Student Achievement*

6%
40%
54%

■ % Grade 2 Acceptable
■ % Grade 2 Improve
□ % Grade 2 No Improve
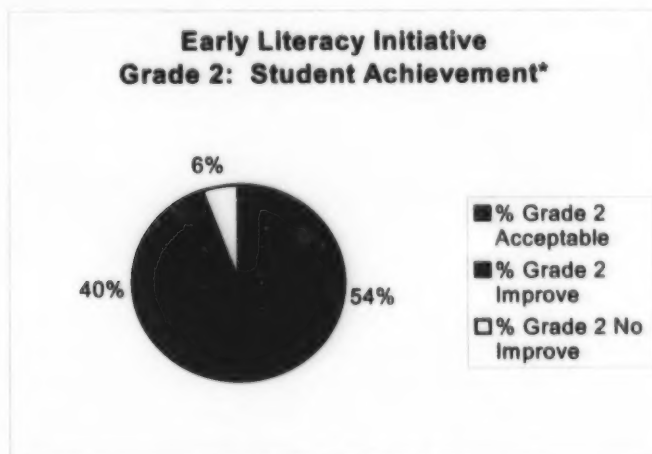
*Grade 2 results were not reported for 1 619 students.

Analysis

The response rate was 80% which was affected by the lower response rate obtained from the private and charter authorities participating in the Early Literacy program. As with other schedules, the high response rate from jurisdictions supports the assumption that the reported data is representative of actual conditions in these authorities.

There was an internal inconsistency in the results reported in this schedule reflected by the expectation that the reported counts of students served would equate to the sum of the students for whom results were reported. The overall congruence was 78%. In many cases the results data were difficult to isolate for the ELI interventions.

The results information is useful as an overall indicator of program success. Care has been taken in defining mutually exclusive outcome categories. However, a more refined analysis of results should be considered based on reading and writing assessments; information on type of literacy program offered and assessment strategies used. Ultimately, reporting of the longer term impact of ELI on grade 3 English Language Arts achievement test results will be an important measure. The optimal reporting format for this enhanced information would be a combination of field-based program evaluation and revised data fields in the student information system.

Also noteworthy, literacy programs differ between schools within a given jurisdiction so impacts of different approaches cannot be determined with the MIRS framework.

In view of the above, the MIRS Schedule 6 for ELI is being replaced by a dual approach. The first component would be a sample survey of schools, which would collect program and process information as well as student outcomes, and would be supplemented by follow up interviews. The sample size will be sufficient to represent the population with reasonable confidence. The second component would be longer term consideration of an enhancement to current student reporting information, to include identification of students for whom early literacy intervention has occurred, and association of this with achievement test data.

Program Enhancement Project

The purpose of the Program Enhancement Project (PEP) funding is to provide special programs and services through approved projects to meet the educational needs of children who are economically disadvantaged. Although all Early Childhood Services (ECS) operators receive block PEP funding, only those operators with approved projects were required to complete schedule 7a. Total allocated funding for PEP for 1998-1999 was $1 756 573.

2 472 children were reported on Schedule 7a and of this number 90% (2 172) were reported as improving their academic skills, and 64% (1 551)were reported to have improved social skills. Only 2% (40) of the children were reported as demonstrating no improvement. Based on these numbers, project spending averaged $711 per student

Program Enhancement Project Student Achievement*
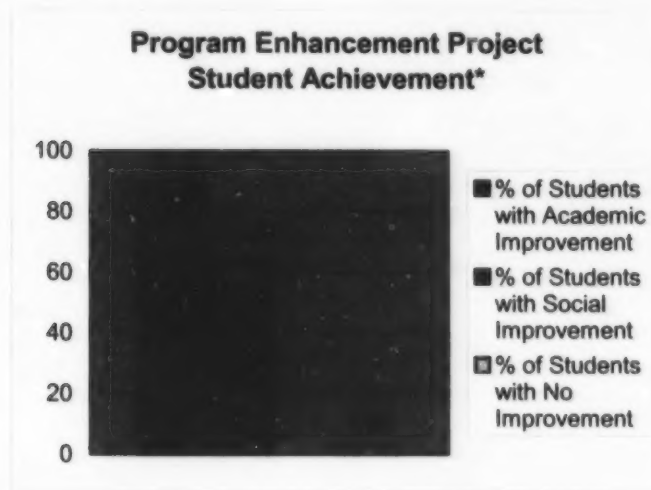
*Results were not reported for an estimated 260 children.

Analysis

The response rate was very high (96%). However, again there was an internal inconsistency in the results reported on this schedule. The overall congruence between students reported served in relationship to the number of students for whom results were reported was 89%.

The results information provides only a very general indicator of program success. There is no objective standard against which improvement is to be measured; there is no distinction between levels of academic improvement; and there is no distinction between literacy and numeracy improvement. There is also no information on types of PEP programs offered, nor indications of assessment strategies used to select children for the programs.

PEP programs differ between schools within a given jurisdiction so impacts of different approaches cannot be determined with the MIRS framework.
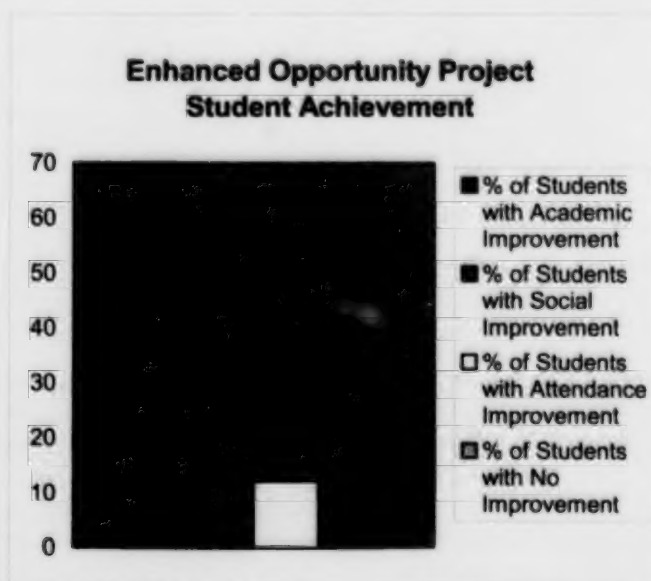
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School authorities apply for PEP funding by completing a form which provides information on program eligibility, types of interventions planned, levels of partner involvement, expected outcomes, planned evaluation and reporting strategies, and planned budget allocations. All of this information is provided in anecdotal format. Authorities are also expected to provide a summative evaluation of their projects to Alberta Learning.

The MIRS schedule for PEP is being eliminated. It is recommended it be replaced by the project level reporting noted above. In subsequent years, there may be some scope for introducing some quantification into the application and evaluation forms to add reliability to the analysis of results and/or to completing a provincial evaluation of the PEP program.

Enhanced Opportunity Project

The purpose of Enhanced Opportunity Project (EOP) funding is to provide special programs and services through approved projects to meet the educational needs of students who are economically disadvantaged. The needs of students in grades 1 - 12 enrolled in eligible schools are served through EOP funding. Total allocated funding for EOP for 1998-1999 was $2 995 418.

15 733 students were reported on Schedule 7b as being served by EOP and of this number 63% (9 911) showed academic improvement, 38% (5 987) had social improvement and 12% (1 926) demonstrated improved attendance. One percent (166) were reported as experiencing no improvement. Based on these numbers, project spending averaged $190 per student.

**Enhanced Opportunity Project
Student Achievement**

■ % of Students with Academic Improvement

■ % of Students with Social Improvement

□ % of Students with Attendance Improvement

□ % of Students with No Improvement

*Results were not reported for an estimated 5 656 students.

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Analysis

The response rate was 90%. However, as with ELI and PEP, there was a significant internal inconsistency in the results reported on this schedule with overall congruence between students reported served and students for whom data was reported at 64%.

The results information provides only a very general indicator of program success. There is no objective standard against which improvement is to be measured and there is no distinction between marginal and significant improvement. There is also no information on types of EOP programs offered, nor indications of assessment strategies used to select children for the programs. Also, EOP programs differ between schools within a given jurisdiction so impacts of different approaches cannot be determined with the MIRS framework.

School authorities apply for EOP funding by completing a form which provides information on program eligibility, types of interventions planned, levels of partner involvement, expected outcomes, planned evaluation and reporting strategies, and planned budget allocations. All of this information is provided in anecdotal format. Authorities are also expected to provide a summative evaluation of projects to Alberta Learning.

The MIRS schedule for EOP is being eliminated. It is recommended that the MIRS schedule be replaced by the project level reporting noted above. In subsequent years, there may be some scope for introducing some quantification into the application and evaluation forms to add reliability to the analysis of results and/or to conducting a provincial evaluation of the EOP program.

English as a Second Language

The purpose of the English as a Second Language (ESL) funding is to assist Canadian-born and non Canadian-born ESL students in grades 1-12 in meeting grade level standards in English Language Arts. Total allocated funding for ESL for 1998-1999 was $8 870 109. The majority (9 130) of the 15 685 reported as served by ESL programs were Canadian born. 6 555 of the ESL students were not Canadian born. Based on these numbers, ESL spending averaged $565 per student.
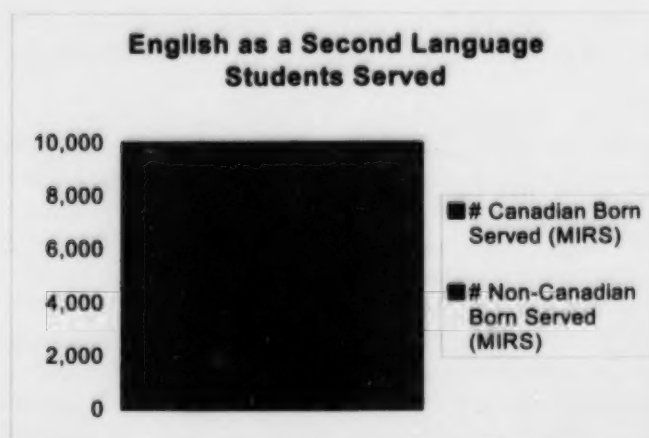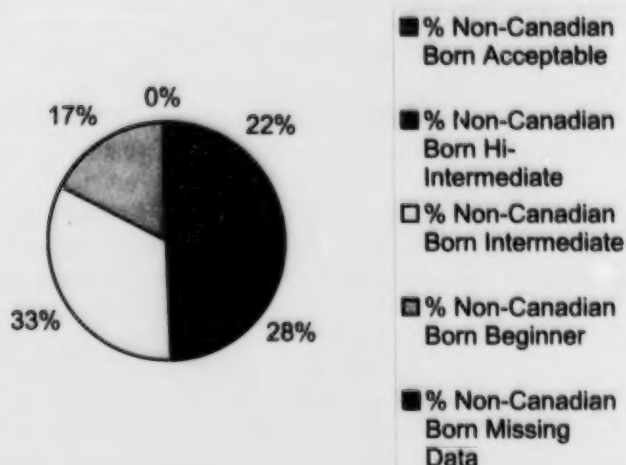

Student results data, reported on Schedule 8, had a high degree of concurrent validity in relationship to the number of students served. Results achieved for Canadian born and non-Canadian born students were quite similar as depicted in the charts below.
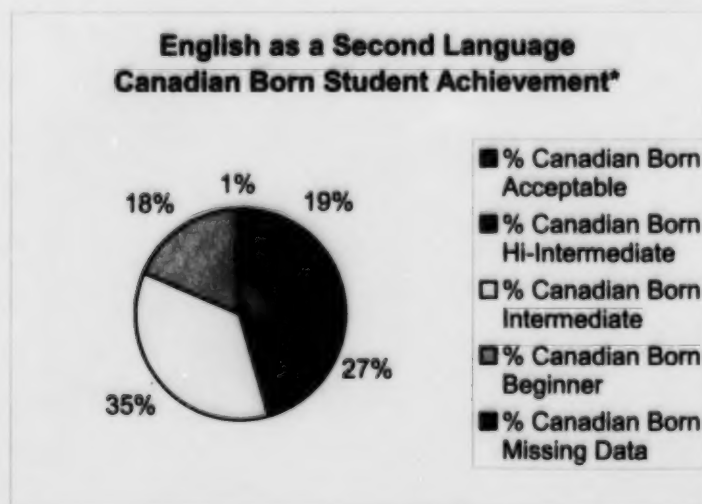
*Results were not reported for a small number (1%) of Canadian born ESL students.

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English as a Second Language
Student Achievement*

Legend:
- ■ % Non-Canadian Born Acceptable
- ■ % Non-Canadian Born Hi-Intermediate
- □ % Non-Canadian Born Intermediate
- ▨ % Non-Canadian Born Beginner
- ■ % Non-Canadian Born Missing Data

Pie chart values: 22%, 28%, 33%, 17%, 0%

*Results were not reported for less than 1% of the non-Canadian born ESL students.

AS: The student demonstrates skills in **listening, speaking, reading and writing** in English language arts that are **at the acceptable standard for the expected grade level.**.

HI: The student demonstrates skills **in listening, speaking and reading** skills that are **at the expected grade level**** and **writing** skills that are **below the expected grade level.**.

I: The student demonstrates **listening and speaking** skills that are **at the expected grade level**** and **reading and writing** skills that are **below the expected grade level.**

B: The student demonstrates little or no skills in **listening, speaking, reading and writing** using English language arts materials that are **below the expected grade level**

Analysis

The response rate was very high (97%). Also, there was a strong internal consistency in the results reported on this schedule with an overall congruence between students reported served and students for whom results were reported at 99%.

The results information is useful as an overall indicator of program success. Care has been taken in defining mutually exclusive outcome categories that should be well understood by respondents. As well, calculation worksheets and an explanation of the provincial reporting framework were provided, which should ensure a high reliability of reported results.

In future, a more refined analysis of results should be considered based on separate listening, speaking, reading and writing assessments; information on type of ESL program offered and strategies used to assess English language capability. Ultimately, reporting of the longer term impact of ESL programs on results in English Language Arts achievement tests and English diploma exams will be an important measure. The optimal reporting format for this enhanced information would be a combination of program evaluation and revised data fields in the student information system.

Literacy programs may differ between schools within a given jurisdiction so impacts of different approaches cannot be determined in the current framework.
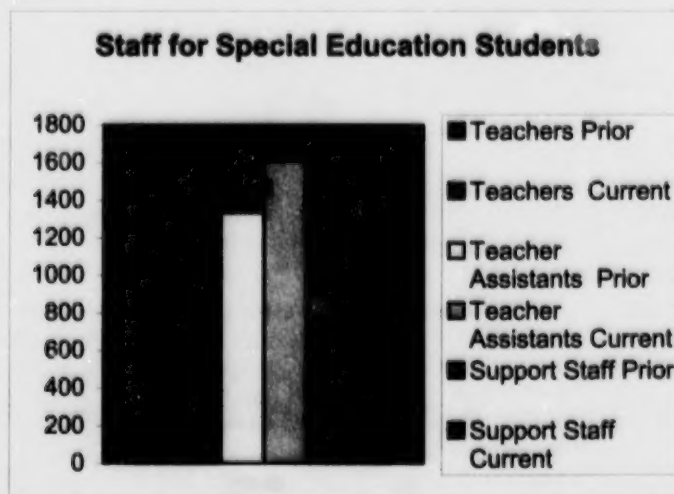
In view of the above, the MIRS Schedule 8 for ESL will be retained for 1999-2000 and considered for enhancement in 2000-2001. In addition, analysis of English Language Arts exam results for students who have received ESL assistance should be completed.

Special Education

Funding for students with mild/moderate/gifted special needs is included in the basic instructional grant provided to school boards, charter schools and private schools. Schedule 9 was intended to estimate the extent these funds are used to support programs for students to improve their levels of achievement and the results achieved.
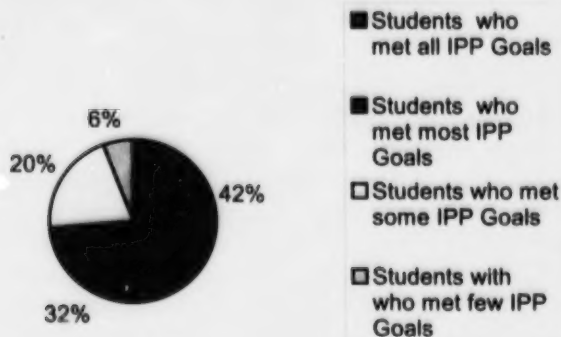
Two options were available for reporting special education student outcomes. Schedule 9a reported mild and moderate student outcomes based on the attainment of goals defined in the students Individual Program Plan (IPP) and Schedule 9b reported mild, moderate and gifted student results based on achievement in relationship to the students expected grade level. Data reporting the numbers of staff hired to provide programs to mild, moderate or gifted students were combined across the two schedules.

Staffing data reported by school authorities demonstrate substantive increases in the numbers of teachers, teacher assistants and other support staff hired from 1997-1998 (prior) to 1998-1999 (current). If reported as percentage increases, the data conveyed in the chart below would be increases of 14.4%, 20.6% and 12.1% for teachers, teacher aides and other support staff respectively.

Staff for Special Education Students

1800	■ Teachers Prior
1600	
1400	■ Teachers Current
1200	
1000	□ Teacher Assistants Prior
800	⊞ Teacher Assistants Current
600	
400	■ Support Staff Prior
200	
0	■ Support Staff Current

18 112 mild and moderate students were reported on schedule 9a. Of this number 7 019 were reported as meeting all Individual Program Plan (IPP) goals, 5 365 were reported as meeting most IPP goals, 3 419 met some IPP goals, and 992 met few IPP goals.
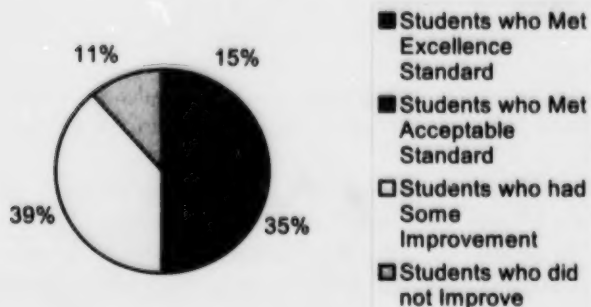

Schedule 9A: Special Education Programs Students served with Mild/Moderate/Special Needs*

- Students who met all IPP Goals
- Students who met most IPP Goals
- Students who met some IPP Goals
- Students with who met few IPP Goals

42% — 32% — 20% — 6%

Results data not available for 1 317 students reported served.

28 407 mild and moderate students and 6 465 gifted students were reported on Schedule 9b. Of these numbers, 4 693 were reported as achieving at the excellent standard for their expected grade level, 11 310 achieved the acceptable standard for their expected grade level, 12 358 demonstrated some improvement, and 3 663 did not improve.

Schedule 9B: Special Education Programs Students Served with Mild/Moderate/Gifted Special Needs*

- Students who Met Excellence Standard
- Students who Met Acceptable Standard
- Students who had Some Improvement
- Students who did not Improve

15% — 35% — 39% — 11%

* Results data not available for 2 848 students reported served.

Analysis

The response rate by authority was 77%. This was affected by the lower response rate obtained from private and charter school authorities. However, some private schools serve very few students with special needs, suggesting that an alternative strategy would be close monitoring of those private schools that do serve substantial special needs students. As with other schedules, the high response rate from jurisdictions supports the assumption that the reported data is representative of actual conditions in these authorities.

There was mild internal inconsistency in the results reported on this schedule. The overall congruence between students reported served and students for whom results were reported was 93%.

The results information is useful as an overall indicator of program success. Care has been taken in defining mutually exclusive outcome categories that should be well understood by respondents. A redesign of the schedule for 1999-2000 will consolidate Schedule 9 into separate reporting for severe and mild/moderate students not writing provincial achievement tests, and focus on progress compared to IPP for the former group and to grade level standards for the latter.

In future, a more refined analysis of results should be considered based on information on type of special needs program offered and assessment strategies used. Ultimately, reporting of the longer term impact of special needs programs on English Language Arts and Math achievement test results will be an important measure. The optimal reporting format for this enhanced information would be a combination of program evaluation and revised data fields in the student information system.

Special needs programs differ between schools within a given jurisdiction so impacts of different approaches cannot be determined in the current framework.

In view of the above, the MIRS Schedule 9 for Special Needs will be significantly modified and retained in MIRS. In future, consideration should be given to enhancing this reporting to accommodate more program information and to collect information at the school level so that a comprehensive model of special education program evaluation can be developed.

Teacher Assistant Program

The Teacher Assistant Program is designed to provide grades 1 - 6 classroom teachers with additional resources to plan and deliver the regular instructional program better.

Just over 10 000 teachers' assistants were reported on Schedule 10 as employed in Alberta in 1999. 534 of the assistants were hired with Teacher Assistant Program funds. This represents over a 5% increase in the number of teacher aides working with students. In total, about $9 449, 388 was allocated to the Teacher Assistant Program in 1999.
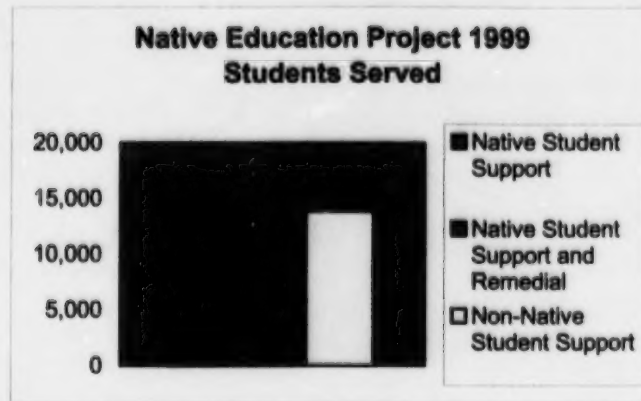
Teacher Assistant Program
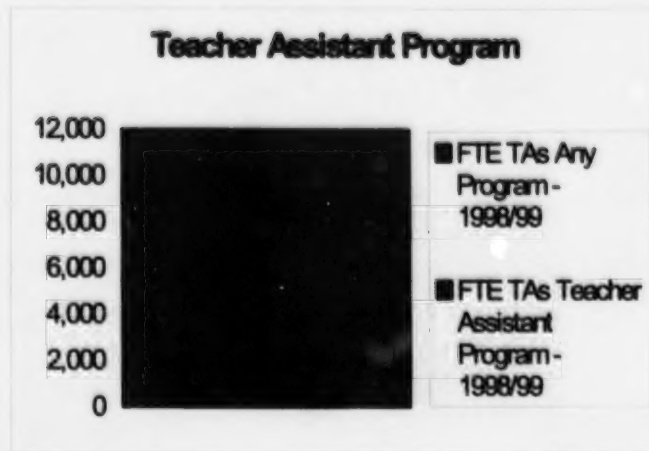
Analysis

This schedule appears to have met the objective of providing reliable data. However, given the narrow scope allowed jurisdictions in using this funding, it is expected that the numbers will not change significantly from year to year. Therefore, it is not necessary to seek this information annually and it has been removed from MIRS for 1999-2000. It may be worthwhile to collect this information again in a few years time (to see if the numbers are still on track), if it still being funded as a separate program.

Native Education Project

The purpose of Native Education Project funding is to provide opportunities for Aboriginal students to learn to the best of their abilities through improved attendance and/or attitudes. This funding is intended also to provide opportunities for Aboriginal people to help guide and shape the education of their children, and to provide enhanced awareness among non-Aboriginal students about Aboriginal culture and history.

20 808 Aboriginal students were reported as served by the Native Education Project in 1999. 72% (15 084) of the Aboriginal students received support; the remaining 28% (5 724) of Aboriginal students received support and remedial assistance. In addition, 13 839 non-Aboriginal students were provided Native Education Project programming.

Native Education Project 1999
Students Served

20,000
15,000
10,000
5,000
0

■ Native Student Support
■ Native Student Support and Remedial
□ Non-Native Student Support

Analysis

Design issues associated with Schedule 11 resulted in reliable outcome data not being reported for students receiving Native Education Project programming, hence this information is not currently available. However, for a detailed monitoring report on the Native Education Projects the reader is referred to the Aboriginal Services Branch in the Basic Learning Division.

Technology Integration Funding

The purpose of the funding for technology integration is to place as much computer technology as possible into Alberta classrooms to enhance student learning. Two payments were issued to school jurisdictions during 1998-1999:
- $40 per funded student in April 1998
- $40 per funded student in May 1999

Technology Integration Funding totaled approximately $49 million from April 1998 – August 1999. This resulted in 21 882 computers being purchased/modernized. In total, there are now 70 667 modern computers in Alberta schools.

The overall student/modern classroom computer ratio was reported in 1998-1999 to be 7.84:1.

Analysis

This schedule is not attempting to measure student outcomes, and is thus limited in scope to measuring resources purchased. It appears to be effective in meeting that limited objective and will be continued in its present form for 1999-2000.

MIRS 1999-2000

MIRS will be simplified for 1999-2000 by eliminating those schedules that performed poorly in collecting student outcomes-based program evaluation data. Schedules 8 and 9 and 12 will continue to be used and Schedule 9 - Special Education is being redesigned through extensive consultations with the field.

A sub-committee of Alberta Learning's Information Reporting Committee is also considering how the student information system might be redesigned over the longer term to replace the MIRS schedules with a more efficient and effective program evaluation data model.

Schedule 6 is being replaced in 1999-2000 by an ELI sample survey being administered by System Improvement and Reporting Division. Schedule 7 should be replaced by an analysis of PEP and EOP program summative evaluation reports submitted by jurisdictions and/or a provincial evaluation of the PEP/EOP programs in 2000-2001.

Appendix 1

Schedule Requirements by School Authority

The table below defines the schedule number, name, school authorities required to submit the specific schedule and the relevant section of the *Funding for School Authorities Manual* relating to the related program or funding initiative.

Schedules Due November 30, 1999

Schedule ID	Funding Initiative	School Authorities Required to Submit Schedule	1998-1999 Funding Manual Reference
Schedule 6	Early Literacy Initiative	School jurisdictions, charter schools, private ECS operators and private schools that **applied for and received funding**	1.A.10 2.8 3.7
Schedule 7a	Program Enhancement Project	**Approved** projects for ECS programs operated by school jurisdictions, charter schools and private ECS operators	2.4
Schedule 7b	Enhanced Opportunity Project	**Approved** projects of school jurisdictions and charter schools	1.A.4
Schedule 8	English as a Second Language Program	**All** school jurisdictions, and those **charter schools that received funding**	1.A.3
Schedule 9A or 9B	Special Education Programs	**All** school jurisdictions, charter schools and private schools	1.A.1 3.1
Schedule 10	Teacher Assistant Program	**All** school jurisdictions and charter schools	1.A.9
Schedule 11	Native Education Project	**Approved** projects for school jurisdictions	1.A.5
Schedule 12	Technology Integration Funding	**All** school jurisdictions and charter schools	1.A.12

Not all schedules were received by the required reporting deadline of November 30, 1999, therefore, in January 2000 Alberta Learning staff contacted all school authorities for whom schedules were missing. An extended deadline of February 4, 2000 was established and data entry was cut off shortly after this date.